Appl. No.	:	**10/042,775**
Filed	:	**January 8, 2002**
Response to	:	**Office Action dated March 18, 2005**

AMENDMENTS TO THE CLAIMS

Please add new Claims 37-43. Please cancel Claims 17-19, 21, and 32-36.

1. (previously presented) A method for recombinantly producing functional ataxia-telangiectasia (ATM) protein, comprising:

providing a viral vector comprising a cDNA encoding the ATM protein operably linked to a promoter;

infecting ATM deficient mammalian L3 cells with said viral vector, wherein said mammalian L3 cells are thereby made to produce functional ATM protein; and

isolating said functional ATM protein produced by said mammalian L3 cells.

2. (previously presented) The method of Claim 1, wherein said viral vector comprising a cDNA encoding the ATM protein operably linked to a promoter is a vaccinia viral vector.

3. (cancelled)

4. (cancelled)

5. (original) The method of Claim 1, wherein said promoter is a synthetic early/late viral promoter.

6. (cancelled)

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (previously presented) The method of Claim 1, further wherein said ATM-deficient mammalian L3 cells producing said functional ATM protein exhibit regain of ATM function.

11. (original) The method of Claim 1 wherein isolating said functional ATM protein comprises binding an anti-ATM antibody to said ATM protein.

12. (previously presented) The method of Claim 1, where said cDNA encoding the ATM protein is modified to comprise a FLAG epitope.

Appl. No.	:	**10/042,775**
Filed	:	**January 8, 2002**
Response to	:	**Office Action dated March 18, 2005**

13. (original) The method of Claim 12, wherein isolating said functional ATM protein comprises binding an antibody specific for the FLAG epitope to said ATM protein.

14. (cancelled)

15. (original) The method of Claim 1, further wherein said functional ATM protein is capable of phosphorylating ATM substrates.

16. (original) The method of Claim 15, wherein said substrates comprise p53 and PHAS-1.

17-36. (cancelled)

37. (new) A method for recombinantly producing functional ataxia-telangiectasia (ATM) protein, comprising:

providing a vaccinia viral vector comprising a cDNA encoding the ATM protein operably linked to a promoter;

infecting HeLa cells with said vaccinia viral vector, wherein said HeLa cells are made to express said cDNA and thereby produce functional ATM protein; and

isolating said functional ATM protein produced by said HeLa cells.

38. (new) The method of Claim 37, wherein said promoter is a synthetic early/late viral promoter.

39. (new) The method of Claim 37 wherein isolating said functional ATM protein comprises binding an anti-ATM antibody to said ATM protein.

40. (new) The method of Claim 37, where said cDNA encoding the ATM protein is modified to comprise a FLAG epitope.

41. (new) The method of Claim 40, wherein isolating said functional ATM protein comprises binding an antibody specific for the FLAG epitope to said ATM protein.

42. (new) The method of Claim 37, wherein said functional ATM protein is capable of phosphorylating ATM substrates.

43. (new) The method of Claim 42, wherein said substrates comprise p53 and PHAS-1.